

sense: Education and training are factors in determining the employment capacity of a miner. Lack of formal schooling, however, is not necessarily proof that a miner is an uneducated person. The kinds of responsibilities with which he was charged when working may indicate ability to do more than unskilled work even though his formal education has been limited.

§ 410.428 X-ray, biopsy, and autopsy evidence of pneumoconiosis.

(a) A finding of the existence of pneumoconiosis as defined in § 410.110(o)(1) may be made under the provisions of § 410.414(a) if:

(1) A chest roentgenogram (X-ray) establishes the existence of pneumoconiosis classified as Category 1, 2, 3, A, B, or C according to:

(i) The ILO-U/C International Classification of Radiographs of Pneumoconioses, 1971; or

(ii) The International Classification of Radiographs of the Pneumoconioses of the International Labour Office, Extended Classification (1968); or

(iii) The Classification of the Pneumoconioses of the Union Internationale Contra Cancer/Cincinnati (1968).

A chest roentgenogram (X-ray) classified as Category Z under the ILO Classification (1958) or Short Form (1968) will be reclassified as Category 0 or Category 1 and only the latter accepted as evidence of pneumoconiosis. A chest roentgenogram (X-ray) classified under any of the foregoing classifications as Category 0, including subcategories o/–, o/o, or o/1 under the UICC/Cincinnati (1968) Classification, is not accepted as evidence of pneumoconiosis; or

(2) An autopsy shows the existence of pneumoconiosis, or

(3) A biopsy (other than a needle biopsy) shows the existence of pneumoconiosis. Such biopsy would not be expected to be performed for the sole purpose of diagnosing pneumoconiosis. Where a biopsy is performed for other purposes, however (e.g., in connection with a lung resection), the report thereof will be considered in determining the existence of pneumoconiosis.

(b) The roentgenogram shall be of suitable quality for proper classifica-

tion of the pneumoconioses and conform to accepted medical standards. It should represent a posterior-anterior view of the chest, and such other views as the Administration may require, taken at a preferred distance of 6 feet (a minimum of 5 feet is required) between the focal point and the film on a 14 × 17 inch or 14 × 14 inch X-ray film. Additional films or views should be obtained, if necessary, to provide a suitable roentgenogram (X-ray) for proper classification purposes.

(c) A report of autopsy or biopsy shall include a detailed gross (macroscopic) and microscopic description of the lungs or visualized portion of a lung. If an operative procedure has been performed to obtain a portion of a lung, the evidence should include a copy of the operative note and the pathology report of the gross and microscopic examination of the surgical specimen. If any autopsy has been performed, the evidence should include a complete copy of the autopsy report.

§ 410.430 Ventilatory studies.

Spirometric tests to measure ventilatory function must be expressed in liters or liters per minute. The reported maximum voluntary ventilation (MVV) or maximum breathing capacity (MBC) and 1-second forced expiratory volume (FEV₁) should represent the largest of at least three attempts. The MVV or the MBC reported should represent the observed value and should not be calculated from FEV₁. The three appropriately labeled spirometric tracings, showing distance per second on the abscissa and the distance per liter on the ordinate, must be incorporated in the file. The paper speed to record the FEV₁ should be at least 20 millimeters (mm.) per second. The height of the individual must be recorded. Studies should not be performed during or soon after an acute respiratory illness. If wheezing is present on auscultation of the chest, studies must be performed following administration of nebulized broncho-dilator unless use of the later is contraindicated. A statement shall be made as to the individual's ability to understand the directions, and cooperate in performing the tests. If the tests cannot be completed the reason for such failure should be explained.